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GROUP STUDIES FUTURE OF TOWN

A six-man committee of representatives from LASL, AEC and the Zia Company has been appointed to develop a new long-range plan for Los Alamos community development, K. F. Hertford, AEC-ALO manager announced last week. Included on the committee, headed by John J. Burke, deputy manager of AEC's Los Alamos area office, are Harold M. Agnew, alternate W Division leader and state senator; John V. Young, head of LASL's Public and Employee Relations; James P. Hogan, AEC-LAAO counsel, Lloyd C. Kersey, AEC-ALO, and Robert A. Smith, budget officer for Zia.

According to the AEC release, the group is expected to study ultimate goals with respect to self-government, local responsibility for municipal operations and services, home ownership, and a sound commercial structure. It is further expected to identify problems, outline an orderly pattern of actions, identify AEC policy required, and suggest necessary local, state and federal legislation. The report is to be concluded by June 1, 1960.

This will be the third formal study conducted by the AEC with respect to the Los Alamos community. Responsibilities of the new committee are generally similar to those assigned to the Scurry Panel which conducted a study in 1952, and a local Los Alamos Planning Committee which made a further study in 1953.

The former studies have resulted in major related actions, the AEC said, in-

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Hill Home Owners To Send Representative to Hearings

By press time Friday, the NEWS had been unable to obtain detailed plans for the congressional hearings scheduled to be held in the Los Alamos civic auditorium on December 7 and 8. Information on times and agenda for the hearings was still in the hands of the Joint Committee on Atomic Energy in Washington and was expected to be released shortly.

Meanwhile, the Los Alamos Home Owners Association announced that Wallace Leland, P-3, will represent the association at the hearings. Leland plans to discuss some of the problems connected with private home building and will advocate continued development of Barranca Mesa by the AEC, the association said. Barranca Mesa is expected to be one of the key issues to be brought up at the hearings which are under the auspices of the subcommittee on communities headed by Senator Harry N. Jackson of Washington. Leland was the Home Owners' first president and is currently a member of the organization's executive committee.

The open hearings, being held to discuss community problems in Los Alamos, will be conducted by Jackson and Senator Clinton P. Anderson, chairman of the Joint Committee on Atomic Energy.

LIKE A CHILD AT CHRISTMAS, the Aga Khan expressed unabashed delight at his gift of trinitite presented on behalf of the Laboratory director, Norris E. Bradbury, during the Moslem leader's Thanksgiving day visit. "I'm going to have this on display wherever I go," the pleased prince announced later as he sneaked another peek at his new treasure. With him is Dr. Thomas L. Shipman, H Division leader. — Staff photo

YOUNG AGA KHAN TOURS HEALTH LAB ON SURPRISE THANKSGIVING VISIT

The boy god of twenty million people dropped in on Los Alamos to spend Thanksgiving morning.

His Highness The Aga Khan IV, handsome 23-year-old spiritual leader of Ismaili Moslems in 21 countries, flew in early Thursday by special Carco on a surprise visit to inspect the facilities and the work of the Health Research Laboratory and to discuss research problems with Dr. Thomas L. Shipman, H Division leader, and Wright H. Langham, associate division leader for biomedical research.

FUND-RAISING

The young prince is on a two and a half million dollar fund-raising tour to help the African Research Foundation finance a medical research wing at the Aga Khan Platinum Jubilee Hospital established by the prince last year in Nairobi, Kenya, East Africa. The money raised by the foundation will be matched by a personal gift from the Aga Khan.

Accompanying the Aga Khan on his trip, which combines fund raising with inspection of various research facilities in the country, are Dr. Thomas D. Rees of New York, president of the foundation; Michael Curtis, Kenya newspaper publisher; and Madame Beguel, the Aga Khan's private secretary. The trip to Los Alamos was an off-shoot of a brief visit with Dr. Randolph Lovelace, head of the Lovelace Clinic in Albuquerque and a foundation director. Dr. Lovelace accompanied the group to the Hill.

SHARP QUESTIONS

Friendly, smiling and intensely interested in all he saw, the Aga Khan impressed his scientific hosts with astute questions on every phase of medical research. He manifested particular interest in the Laboratory's work in tissue culture and its potentials for cancer research, in the genetic effects of both radiation and inbreeding in mouse colonies, the use of radioactive isotopes in diagnostic medicine, and the possibilities of using whole body counters for studying problems of aging.

The Moslem dignitary eagerly donned the required surgeon's scrub suit to be measured in the Laboratory's whole body counter and appeared gratified to learn that his high potassium content indicated top physical condition.

Eldest son of Prince Aly Khan, the prince succeeded his grandfather, Aga Khan III as Iman of the Shiah Moslem Ismaili sect on July 12, 1957. In nominating his grandson as his successor, the Aga III wrote in his will:

"In view of the fundamentally altered conditions of the world in recent years,

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LASL TO MEASURE DOSE IN SPACE

The radiation dose the first astronaut may encounter in his future explorations of outer space should be determined this winter by Los Alamos scientists.

Marvin Van Dilla and Ernest Anderson of the Biomedical Research group, working with a team from Kirtland Air Force Base, hope to obtain this valuable information from a tissue equivalent dosimeter aboard a satellite scheduled to be fired into orbit from Vandenburg Air Force Base soon. The satellite is expected to carry the dosimeter into a low altitude north-south orbit (about 200 miles high) similar to that planned for Project Mercury astronauts.

LIKE TISSUE

The little device, which weighs only 1½ pounds and measures 3" in diameter by 8" long, will contain a 3" ionization chamber made of tissue-like lucite which will soak up radiation just as human tissue does. Dose information will be radioed back to earth from a tiny transistorized electrometer circuit in the bottom half of the package. The information will make it possible to determine the amount of energy that would be deposited in a living organism in space and to calculatae its biological effects.

Designed and built by electronics engineers John Larkins and James Perrings of H-4 and Richard Hiebert of P-1, the tissue chamber will cover a wide dose range of from 0.1 to 100 roentgens per hour. Its quarter-inch-thick walls will permit penetration of protons with energies of 25 Mev and up and electrons of 1 Mev and up.

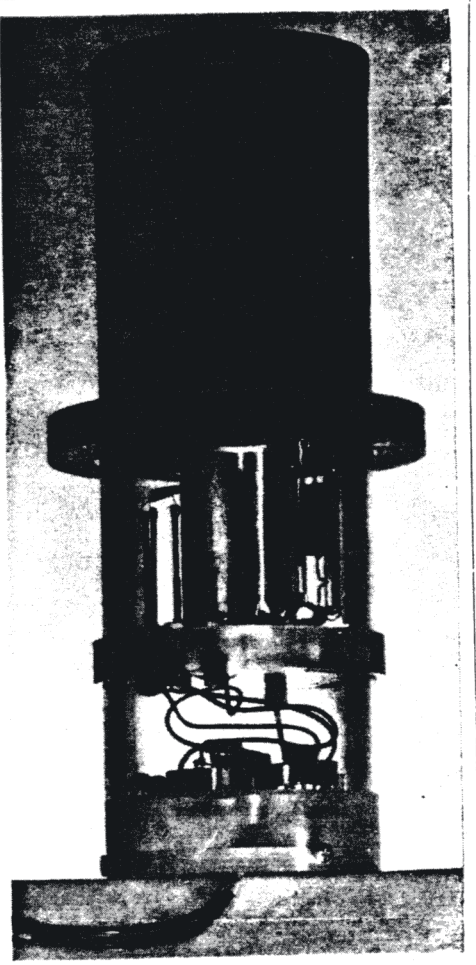
To insure its accuracy and stability in flight, the chamber already has been subjected to tests simulating the worst environmental stresses to be expected in rocket flight. All produced little or no change in the chamber's ion current. The tests, all conducted under irradiation, included acceleration up to 100 g, vibration tests of 30 to 2,000 cycles per second, temperature tests from 40 to 140 degrees F, and various vacuum conditions.

HAZARD DATA

In describing the purpose of the dosimeter flight, Dr. Thomas L. Shipman, H Division leader, pointed out that previous physical measurements of radiation in space have resulted in the discovery of the Van Allen belts and other facts. "Unfortunately," he said, "none of this data is of practical value in assessing the actual hazard to man when he ventures into outer space. From facts gathered so far, it is impossible to determine the complicated behavior and effects of these radiations in living tissue. The tissue chamber flight represents the first attempt to study this phenomena and gain a clearer insight into the problems which must be solved before humans can be sent into outer space with confidence that they will be returned.

Dig Delayed

Excavation of the Community Center ruin, originally scheduled to begin last Saturday, was postponed by cold and snow, according to Fred Worman, Laboratory anthropologist in charge of the work. Worman said he hopes to begin digging next Saturday if all the snow is off the ground. At a pre-dig meeting last week about 60 people expressed interest in helping with the excavation.



DOSIMETER designed to soak up radiation just like human tissue does, will be flown in a satellite through Van Allen radiation belts to determine the dose future astronauts may encounter. Top half of device is tissue-like dosimeter, lower portion is telemetry equipment.

White Rock Plan Okeyed

Authority to proceed with its plan for development of a 200-lot housing subdivision at White Rock was received from Washington this week by the local office of the AEC, Area Manager Paul Wilson announced.

Invitations to bid will be issued as soon as administrative details are completed, Wilson said.

Successful bidders, according to the plan, will be able to choose from several 200 acre plots in the 1,000 acre White Rock area, and to purchase the land at $25.00 per acre.

Japanese Scientist Visits

Dr. Noburu Yamagata, chief of the radiological health laboratory at the Institute of Public Health in Tokyo, spent a day recently visiting the Health Research Laboratory as a guest of M. F. Milligan, H-5. Dr. Yamagata is traveling in this country under a grant from the Rockefeller Foundation to observe research and teaching in biogeochemistry, radiochemical analysis and radiological health.

APS HEARS 12 LASL PAPERS

The Division of Plasma Physics of the American Physical Society will hear 12 papers by Laboratory physicists at a meeting in Monterey, California this week.

On the program are "The Stability of a Plasma Torus: I. Mathematical Formulation" by B. R. Suydam, T-9; " 'Free Wheeling' Operation of a Rotating Plasma" by D. A. Baker and J. E. Hammel; "Hydromatic Plasma Gun" by John Marshall; "Photoelectric Spectroscopy of a Magnetically Compressed Plasma" and "Soft X Radiation from a Magnetically Compressed Plasma," both by G. A. Sawyer, T. F. Stratton and F. C. Jahoda. Authors of all these papers are in P-15 except Jahoda who is in J-10.

Papers from P-14 include "Plasma Compression by Rising Axial Magnetic Fields (Orthogonal Pinch)" by J. W. Mather and A. H. Williams; "A Fast High Current High Voltage Vacuum Switch" by Mather and Williams; "Magnetic Field Distribution and Optical Measurements in Perhapsatron S-5" by D. C. Hagerman and J. P. Mize; "Diagnostic Measurements of Perhapsatron S-5" by Mize, Hagerman and D. W. Lier; "Energy Distribution in the Radiation Spectrum from a Toroidal Pinch Discharge" and "Energy Loss Measurements in the Far Vacuum Ultraviolet from a Toroidal Pinch Discharge," both by J. Osher, H. Karr, and E. A. Knapp; and "Mechanism for Impurity Radiation Growth in a Pinch Discharge" by E. Knapp, J. Osher, H. Karr and E. J. Stovall.

Earlier this week Martha Evans, T-3, presented a paper entitled "Solving 'Unsolvable' Hydrodynamic Problems" at the Eastern Joint Computer Conference in Boston. The same conference also heard "A Generalized Keypunch for Cards and Paper Tape" by E. A. Voorhees and W. J. Worlton, T-1.

R. K. Zeigler, T-1, will present a paper entitled "Estimation of Parameters in Non-Linear Equations" at the AEC Office of Operations Analysis and Forecasting in Germantown, Maryland, December 8 and 9.

Aga Khan—

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due to the great changes that have taken place including the discoveries of atomic science, I am convinced that it is in the best interests of the Shiah Moslem Ismaili community that I should be succeeded by a young man who has been brought up and developed during the recent years and in the midst of a new age and who brings a new outlook on life to his high office as Iman."

Assuming his responsibilities, the new Iman interrupted his studies at Harvard to make an extended tour of Ismaili settlements in the Middle East, Africa and Asia. A year later he returned to school and was graduated with honors in June this year. Before leaving Harvard, he made a gift of $50,000 which, with a like amount spent by the university, established a ten-year program of scholarship assistance at Harvard for students from Asia and Africa.

Expressing extreme appreciation for his whirlwind visit, the engaging young leader told his hosts: "Don't be surprised when you hear of my making speeches in Pakistan about all I have learned here. It has been a really wonderful visit."